<u>Amendments to the Claims:</u>

This listing of claims will replace all prior versions and listings of claims in the application.

<u>Listing of Claims:</u>

1. **(Currently amended)** A method for forwarding multicast message in network communication ~~comprises~~comprising:

a. ~~configur~~establishing a forwarding match condition at an ~~entry~~ingress interface ~~to~~of ~~the~~a network device ~~requiring~~required to forward~~ing~~ multicast message, the forwarding match condition ~~regulat~~specifying a multicast message forwarding rule for ~~the~~multicast message, the multicast message forwarding rule having a message forwarding destination specified therein;

b. ~~match~~comparing ~~the~~a multicast message ~~to be forwarded to~~which enters the network device through the interface and needs to be forwarded with the established forwarding match condition;

c. forwarding the multicast message according to the ~~match~~comparing result.

2. (Original) A method for forwarding multicast message in network communication of claim 1, wherein said forwarding match condition is a multicast message forwarding rule group consisting of more than one multicast message forwarding rule.

3. **(Currently amended)** A method for forwarding multicast message in network communication of claim 2, wherein said step b comprises:

b1. determining whether the message entering through the interface is a multicast message;

b2. if the message entering through the interface is a multicast messageyes, matchcomparing the multicast message with individual multicast message forwarding rules contained in the forwarding match condition;

b3. if the message entering through the interface is not a multicast messageno, forwarding the message in single broadcastunicast mode.

4. **(Currently amended)** A method for forwarding multicast message in network communication of claim 3, wherein said step b2 comprises step of matchcomparing the source address information in the multicast message with the source address information in the multicast message forwarding rule.

5. **(Currently amended)** A method for forwarding multicast message in network communication of claim 3, wherein said step b2 comprises step of matchcomparing the source address and destination address information in the multicast message with the source address and destination address information in the multicast message forwarding rule.

6. **(Currently amended)** A method for forwarding multicast message in network communication of claim 3, wherein said step b2 comprises step of matchcomparing the entryingress interface information in the multicast message with the entryingress interface information in the multicast message forwarding rule.

7. **(Currently amended)** A method for forwarding multicast message in network communication of claim 3, wherein said step b2 comprises:

b21. determining whether there is a multicast message forwarding rule ~~is configured~~established at the interface of the network device;

b22. if there is a multicast message forwarding rule established at the interface of the network device~~yes~~, ~~match~~comparing ~~the~~ information carried by the multicast message with corresponding information in the multicast message forwarding rule;

b23. if no multicast message forwarding rule is established at the interface of the network device, forwarding the multicast message according to ~~the~~ a multicast routing forwarding ~~list~~table.

8. **(Currently amended)** A method for forwarding multicast message in network communication of claim 2~~, 3, 4, 5, 6, or 7~~, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching ~~with the~~ information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition~~yes~~, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to ~~the~~ a multicast routing forwarding ~~list~~table.

9. **(Currently amended)** A method for forwarding multicast message in network communication of claim 8, wherein said step c2 comprises:

c21. determining whether the message forwarding destination ~~configured~~specified in the multicast message forwarding rule is ~~the~~a forwarding ~~exit~~egress interface or ~~the~~a next hop address;

c22. if the destination is ~~the~~a forwarding ~~exit~~egress interface, and ~~for~~if the message is configured with ~~lots~~a plurality of forwarding ~~exit~~egress interfaces, forwarding the message ~~being forwarded~~to all the forwarding egress interfaces after ~~copied~~copying it;

c23. if the destination is ~~the~~a next hop address, forwarding the message according to ~~the~~a ~~single broadcast~~unicast routing forwarding ~~list~~table and ~~for~~if the message is configured ~~with lots~~a plurality of next hop addresses, forwarding the message ~~is forwarded~~to all the next hop addresses ~~of next hops~~ after ~~copied~~copying it.

10. **(Currently amended)** A method for forwarding multicast message in network communication of claim 9, wherein said step c23 comprises:

c231. searching the ~~single broadcast~~unicast routing forwarding ~~list~~table and determining the type of ~~exit~~egress interface corresponding to the next hop address;

c232. if the type of ~~exit~~egress interface is NBMA (Non-Broadcast Multiple Access, i.e. point to multipoint), forwarding the message according to the ~~exit~~egress interface;

c233. if the type of ~~exit~~egress interface is broadcast, forwarding the message according to the next hop address in the ~~single broadcast~~unicast routing forwarding ~~list~~table and

setting the property of the message as ~~single broadcast~~unicast message;

C234. if the type of ~~exit~~egress interface is PTP (Point To Point), directly forwarding the message according to the next hop address ~~regulat~~specified in the multicast message forwarding rule.

11. **(New)** A method for forwarding multicast message in network communication of claim 3, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to a multicast routing forwarding table.

12. **(New)** A method for forwarding multicast message in network communication of claim 11, wherein said step c2 comprises:

c21. determining whether the message forwarding destination specified in the multicast message forwarding rule is a forwarding egress interface or a next hop address;

c22. if the destination is a forwarding egress interface, and if the message is configured with a plurality of forwarding egress interfaces, forwarding the message to all

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the forwarding egress interfaces after copying it;

c23. if the destination is a next hop address, forwarding the message according to a unicast routing forwarding table and if the message is configured with a plurality of next hop addresses, forwarding the message to all the next hop addresses after copying it.

13. (New) A method for forwarding multicast message in network communication of claim 12, wherein said step c23 comprises:

c231. searching the unicast routing forwarding table and determining the type of egress interface corresponding to the next hop address;

c232. if the type of egress interface is NBMA (point to multipoint), forwarding the message according to the egress interface;

c233. if the type of egress interface is broadcast, forwarding the message according to the next hop address in the unicast routing forwarding table and setting the property of the message as unicast message;

C234. if the type of egress interface is PTP, directly forwarding the message according to the next hop address specified in the multicast message forwarding rule.

14. (New) A method for forwarding multicast message in network communication of claim 4, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by

the multicast message in the forwarding match condition, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to a multicast routing forwarding table.

15. **(New)** A method for forwarding multicast message in network communication of claim 14, wherein said step c2 comprises:

c21. determining whether the message forwarding destination specified in the multicast message forwarding rule is a forwarding egress interface or a next hop address;

c22. if the destination is a forwarding egress interface, and if the message is configured with a plurality of forwarding egress interfaces, forwarding the message to all the forwarding egress interfaces after copying it;

c23. if the destination is a next hop address, forwarding the message according to a unicast routing forwarding table and if the message is configured with a plurality of next hop addresses, forwarding the message to all the next hop addresses after copying it.

16. **(New)** A method for forwarding multicast message in network communication of claim 15, wherein said step c23 comprises:

c231. searching the unicast routing forwarding table and determining the type of egress interface corresponding to the next hop address;

c232. if the type of egress interface is NBMA (point to multipoint), forwarding the

message according to the egress interface;

c233. if the type of egress interface is broadcast, forwarding the message according to the next hop address in the unicast routing forwarding table and setting the property of the message as unicast message;

C234. if the type of egress interface is PTP, directly forwarding the message according to the next hop address specified in the multicast message forwarding rule.

17. (New) A method for forwarding multicast message in network communication of claim 5, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to a multicast routing forwarding table.

18. (New) A method for forwarding multicast message in network communication of claim 17, wherein said step c2 comprises:

c21. determining whether the message forwarding destination specified in the multicast message forwarding rule is a forwarding egress interface or a next hop address;

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c22. if the destination is a forwarding egress interface, and if the message is configured with a plurality of forwarding egress interfaces, forwarding the message to all the forwarding egress interfaces after copying it;

c23. if the destination is a next hop address, forwarding the message according to a unicast routing forwarding table and if the message is configured with a plurality of next hop addresses, forwarding the message to all the next hop addresses after copying it.

19. (New) A method for forwarding multicast message in network communication of claim 18, wherein said step c23 comprises:

c231. searching the unicast routing forwarding table and determining the type of egress interface corresponding to the next hop address;

c232. if the type of egress interface is NBMA (point to multipoint), forwarding the message according to the egress interface;

c233. if the type of egress interface is broadcast, forwarding the message according to the next hop address in the unicast routing forwarding table and setting the property of the message as unicast message;

C234. if the type of egress interface is PTP, directly forwarding the message according to the next hop address specified in the multicast message forwarding rule.

20. (New) A method for forwarding multicast message in network communication of claim 6, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching the

information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to a multicast routing forwarding table.

21. **(New)** A method for forwarding multicast message in network communication of claim 20, wherein said step c2 comprises:

c21. determining whether the message forwarding destination specified in the multicast message forwarding rule is a forwarding egress interface or a next hop address;

c22. if the destination is a forwarding egress interface, and if the message is configured with a plurality of forwarding egress interfaces, forwarding the message to all the forwarding egress interfaces after copying it;

c23. if the destination is a next hop address, forwarding the message according to a unicast routing forwarding table and if the message is configured with a plurality of next hop addresses, forwarding the message to all the next hop addresses after copying it.

22. **(New)** A method for forwarding multicast message in network communication of claim 21, wherein said step c23 comprises:

c231. searching the unicast routing forwarding table and determining the type of

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egress interface corresponding to the next hop address;

c232. if the type of egress interface is NBMA (point to multipoint), forwarding the message according to the egress interface;

c233. if the type of egress interface is broadcast, forwarding the message according to the next hop address in the unicast routing forwarding table and setting the property of the message as unicast message;

C234. if the type of egress interface is PTP, directly forwarding the message according to the next hop address specified in the multicast message forwarding rule.

23. **(New)** A method for forwarding multicast message in network communication of claim 7, wherein said step c comprises:

c1. determining whether there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition;

c2. if there is a multicast message forwarding rule matching the information carried by the multicast message in the forwarding match condition, forwarding the multicast message according to the multicast message forwarding rule;

c3. if no multicast message forwarding rule in the forwarding match condition matches the information carried by the multicast message, forwarding the multicast message according to the multicast routing forwarding table.

24. **(New)** A method for forwarding multicast message in network communication of claim 23, wherein said step c2 comprises:

c21. determining whether the message forwarding destination specified in the multicast message forwarding rule is a forwarding egress interface or a next hop address;

c22. if the destination is a forwarding egress interface, and if the message is configured with a plurality of forwarding egress interfaces, forwarding the message to all the forwarding egress interfaces after copying it;

c23. if the destination is a next hop address, forwarding the message according to a unicast routing forwarding table and if the message is configured with a plurality of next hop addresses, forwarding the message to all the next hop addresses after copying it.

25. (New) A method for forwarding multicast message in network communication of claim 24, wherein said step c23 comprises:

c231. searching the unicast routing forwarding table and determining the type of egress interface corresponding to the next hop address;

c232. if the type of egress interface is NBMA (point to multipoint), forwarding the message according to the egress interface;

c233. if the type of egress interface is broadcast, forwarding the message according to the next hop address in the unicast routing forwarding table and setting the property of the message as unicast message;

C234. if the type of egress interface is PTP, directly forwarding the message according to the next hop address specified in the multicast message forwarding rule.